



Aviation Investigation Final Report

Location:	Garwood, Texas	Accident Number:	CEN11CA330
Date & Time:	May 10, 2011, 08:00 Local	Registration:	N5097S
Aircraft:	AIR TRACTOR INC AT-301	Aircraft Damage:	Substantial
Defining Event:	Low altitude operation/event	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

According to a Federal Aviation Administration (FAA) inspector, the pilot reported that he was spraying a field at a low altitude. He said that transmission wires were located near the beginning of the field. He said the airplane encountered an unexpected downdraft which shifted the flight path towards the wires. He unsuccessfully attempted to fly under the wires, but the airplane's propeller and vertical fin struck the wires. The airplane sustained substantial damage to the fuselage, both wings, the vertical fin, and empennage. According to the FAA inspector, the pilot did not report any preimpact or mechanical malfunctions with the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate clearance from transmission wires during a low-level maneuvering flight.

Findings

Environmental issues	Downdraft - Effect on operation
Environmental issues	Wire - Ability to respond/compensate

Factual Information

History of Flight

Maneuvering-low-alt flying	Other weather encounter
Maneuvering-low-alt flying	Low altitude operation/event (Defining event)
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial; Private	Age:	52, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 15, 2009
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR INC	Registration:	N5097S
Model/Series:	AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0119
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	R1340 SERIES
Registered Owner:	ANF AIR SERVICE INC	Rated Power:	600 Horsepower
Operator:	ANF AIR SERVICE INC	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	A3NG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KDUA,699 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	07:55 Local	Direction from Accident Site:	289°
Lowest Cloud Condition:	Thin Overcast / 2000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Overcast / 2000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 14 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.78 inches Hg	Temperature/Dew Point:	22°C / 20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Garwood, TX	Type of Flight Plan Filed:	Unknown
Destination:	Garwood, TX	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	29.449697,-96.509727(est)

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Peter B Brandon; Federal Aviation Administration; Houston, TX
Original Publish Date:	August 30, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=79074

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).